# CLAIMS

1. A method of treating a process stream by catalysis, comprising passing the process stream through a chemical reactor containing catalytic material and including the step of passing the process stream through a layer of filter material located in the reactor, the layer comprising shaped porous bodies of ceramic material, the porosity being from about 65% to about 90%, the pores being defined by struts and walls in at least some of which windows are formed to allow fluid communication between adjacent pores.

2. A method according to Claim 1, wherein the pore size of the pores in the porous bodies ranges from about 50 micron to about 1500 micron.

3. A method according to Claim 1 or 2, wherein the window size is less than 450 μm.

4. A method according to Claim 1, 2 or 3, wherein the porosity of the porous bodies exceeds 75% so that the pores are all interconnected.

5. A method according to any preceding Claim, wherein the density of the body ranges from about 10% to about 30% of theoretical density.

6. A method according to any preceding Claim, wherein the pore surfaces of the bodies are coated with catalytic species prior to use.

7. A method according to any preceding Claim, wherein the filter material is held in a rotating wheel or slide configuration such that only a proportion of the

filter material is exposed to the process stream at any one time and the other portions of the filter are exposed to a regenerative process or being held in a standby mode.

8. A method of fabricating chemical reactor filter material, the material comprising porous bodies having a porosity of from 65 to 95%, the method comprising the steps of:

a) forming a dispersion comprising particles in a liquid carrier and a binder;

b) introducing gas into the dispersion; and

c) removing the liquid carrier to provide a solid article having pores derived from the bubbles,

wherein the dispersion has a critical viscosity selected to be below the level at which the introduction of gas cannot take place and above the level at which entrapped gas bubbles will tend to escape.

9. A method according to Claim 8, wherein the critical viscosity of the dispersion is in the range of from about 5 mPa.s, to about 1000 mPa.s.

10. A method according to Claim 8 or 9, wherein the critical viscosity of the dispersion is in the range from about 25 mPa.s to about 1000 mPa.s.

11. A chemical reactor (10) comprising a filter material (100) formed in accordance with the method of any of Claims 8 to 10.

12. A chemical reactor filter material (100), comprising a plurality of shaped porous bodies, each body having a porosity of from 65 to 95% and

comprising struts (1) and walls (2), at least some of the walls (2) having windows (3) therein to allow fluid communication between adjacent pores (4).

13. A filter material (100) according to Claim 12, wherein the window size is less than 450 μm.

14. A filter material (100) according to Claim 11, 12 or 13, wherein at least some of the surface of at least some of the porous bodies are coated with one or more catalysts.

15. A filter material (100) according to Claim 14, wherein the catalyst is photolytically activated or activatable.